

Operations Profile

Henry-1 trains for all types of rescues in its diverse area of operations, including ocean rescues in Bodega Bay, where crews frequently pull abalone divers and surfers out of harm's way.
Michael Clark Photo



IN IT FOR THE LONG HAUL

AT A TIME WHEN MANY REGIONS ARE DIVESTING THEMSELVES OF PUBLIC ASSETS AND SERVICES, THE HELICOPTER UNIT OF THE SONOMA COUNTY SHERIFF'S OFFICE IS PROVING AN INDISPENSABLE COMMODITY.

by Brent Bergan





The mantra of the Sonoma County Sheriff's Office (SCSO) is "Do more with less," and in today's bleak economic climate that attitude is certainly a necessity. It seems every week *Vertical* Online has a story about bankrupt townships selling off capital assets to stop the bleeding. If you're lucky enough to stick around, you're left with dwindling budgets and high demands for your services — it's a stressful mix that is causing many on the parapublic side of helicopter industry to tighten their belts and brace for the pink slip. However, Henry-1, as Sonoma County Sheriff's Office affectionately calls its Bell 407, and the overall helicopter unit of SCSO have developed a special niche for themselves, supporting every mission possible and making their services indispensable and irreplaceable.

Henry-1 responds to about 900 missions annually: last year that included 55 search and rescues, five forest fires and 350 law enforcement cases. And, the unit and its single helicopter don't just support the 1,576 square miles of Sonoma County (about 60 miles north of San Francisco, Calif.), they help sister counties as far away as Monterey, 170+ miles to the south: having the only long-line-equipped rescue helicopter in the local area means the unit's services are always in need. If that's not enough to keep Henry-1 from being the latest economic casualty, to top it off, two years ago, the county purchased the helicopter from the former operator that supplied Henry-1 with its pilots, and made the pilots and paramedics county employees; further cementing the unit's foothold in the county's annual budget.

THEIR BREAD & BUTTER

Sonoma County, which is known mainly for its wine region, is actually an adventurer's paradise, with a vast array of sporting opportunities. It also has plenty of law enforcement missions in need of helicopter support. As such, the public demands the safety provided by an organic helicopter rescue asset, and SCSO has long recognized the value of helicopters, having utilized them since the early 1960s.

Over the years, SCSO has continued to be at the leading edge of helicopter operations, becoming one of the first parapublic operators to initiate short-haul rescues in the late-1980s. It also converted the first Bell 407 to night-vision-goggle compatibility in 2000.

The helicopter unit provides rescue and law enforcement support 24 hours a day, 365 days a

year. Crews stand watch 10 hours each day, and then head to beeper duty for the remaining 14 hours.

The broad area of responsibility for SCSO's helicopter unit creates a demanding mission profile: from mountain, cliff, ocean and swift-water river rescues, to fire protection and police and SWAT support — day or night. However, nighttime short-haul missions are really only an *extreme* emergency situation, as chief pilot Paul Bradley put it, "The only reason we do night long-line rescues is if someone is going to die."

The short-haul rescue technique, which is designed to be efficient and fast, was adopted to allow SCSO to cover rescue operations in its diverse area of responsibility. The helicopter unit started utilizing them following the United States National Park Service rescue rangers' initiative in 1984 (see p.100, *Vertical*, Feb-Mar 2010). The technique involves rescuers being suspended on a long line, 100 to

OPPOSITE, MAIN Paul Bradley uses vertical reference flying techniques to precisely place the rescuers.

Brent Bergan Photos

OPPOSITE, LEFT Flight paramedic Robert Green is suspended below Henry-1, flown by chief pilot Paul Bradley.

OPPOSITE, RIGHT With Henry-1's full complement of personnel, it's able to handle just about any mission that comes its way, including advanced life support missions.

Eric Lian Photo

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200 feet below the helicopter, while the pilot flies with his or her head popped out the door, looking straight down for reference, and places the rescue technician or tactical flight officer (TFO) with the people in need. The rescuer will then hook up the victim so the pair can be lifted to a safe location. Henry-1 can then be reconfigured into an emergency medical service (EMS) helicopter to transport the victim to an area trauma hospital.

Henry-1 flew the first NVG-equipped Bell 407 and remains at the forefront of technological advances.

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Short-haul operations have helped ensure the unit's immense success over the years. And, partnered with the Bell 407, it has been the perfect tool; as Bradley stated, "What the Bell 407 is to us, a hammer is to a carpenter."

PRACTICE MAKES PERFECT

My first ride in Henry-1 was en route to watch flight paramedic Robert Green and TFO Sgt. Dave Thompson, practice rescuing one another in Annadel State Park, with chief pilot Bradley at the controls. But, this simple mission had a surprising turn that truly illustrated the value of and demand for SCSO's helicopter unit.

We took off from Charles M. Schulz – Sonoma County Airport from the dolly outside the unit's hangar, hovered backward a bit, did a pedal turn, rotated to the right and then were off through America's finest wine country. Thompson had the left seat, with an AeroComputers console sitting in front of him. A handheld controller for the L-3 infrared camera system was to his right, where the left-seat flight controls would normally be. (This configuration allows the cabin's interior to transform into a stretcher carrier.) I sat in back with Green, a former United States Army helicopter medic, who began explaining their gear to me. The back of the 407 held several bags of equipment, including a wet suit, fins and a scuba mask, in case of a water rescue. In the aft baggage compartment was the short-haul gear, ready to go at any time. Said Green, "We have everything we need and can go seamlessly from one operation to the other without reloading."

With the ability to self-launch, SCSO crews take their support responsibility very seriously. Said Bradley, "We take the proactive versus reactive approach to support; we don't get paid to sit down." Everyone pays attention to the radio back at the hangar, or while in flight, and responds if he or she think Henry-1 can be of assistance.

Almost on cue, just before we got to Annadel State Park, I got a real-life demonstration of what this really meant when the radio crackled with a message about ground units attempting to locate a suspect in an auto theft. Without hesitation, the crew went into action: Bradley pulled power and accelerated to the scene of the incident; Thompson typed in the address on the computer station; and Green pulled out the old-school Thomas Guide map to give major and minor cross street information and got ready to assist units in setting up a perimeter or locating the suspect. Within two minutes, Henry-1 circled overhead, just as the "perp" was located and arrested — so, back to training we went.

Bradley landed Henry-1 in an empty field adjacent to a steep, rocky slope thick with trees. Within minutes, Green and Thompson had their gear ready to go, the pilot's door removed and the



ABOVE LEFT Henry-1 is the only short-haul-equipped helicopter in the local area and its services are regularly requested as far away as Monterey, 170 miles to the south.

ABOVE CENTER The Henry-1 Bell 407 is a familiar and welcome sight across Sonoma County.
Eric Lian Photos

ABOVE RIGHT From left: flight paramedic Robert Green, TFO Sgt. Dave Thompson and chief pilot Paul Bradley. **Brent Bergan Photo**

long-line stretched out across the field. Thompson and I hiked up the rock-filled slope to find a good spot to challenge Bradley. Said Thompson smiling, "He's good, he can put that thing anywhere."

We found a large boulder amidst the 50-foot trees, Thompson clambered to the top and waited as Green flew through the air at the end of the long line, pointing to the big rock. With a radio headset, Green assisted Bradley, giving him distances and closure rates, while Bradley flew looking straight down, maintaining his altitude, position and closure.

Green gently touched down on the rock, hooked up Thompson with the strop and then they took off together, straight up, cleanly leaving the boulder and clearing the trees en route to the staging area. With their spots swapped, Thompson flew in, landed on the rock and rescued Green this time. Then they went off for another round, vividly illustrating how swift and efficient short haul truly is.

ONE TIGHT CREW

Each three-member Henry-1 crew works together to accomplish SCSO's broad mission set. And, each crew-member specifically adds a critical element to successfully accomplish every mission demanded of SCSO and deal with every challenging flight condition. It's why training and teamwork is considered essential.

The 12-member helicopter unit — two pilots, two full-time and two part-time TFOs, and six part-time paramedics (off-duty firefighters) — each train regularly. And, once every month the entire unit trains together to ensure

adherence to standards and techniques.

Selecting the right personnel also has been a critical element to the unit's success. Said Bradley, "The only thing new to a pilot in this job is nothing, we can teach the law enforcement." He further explained, "The flying, it's not just something you can pick up, you're expected to make good aviation decisions, and to hire a pilot to do what we do — you can't have a 300-hour pilot." The ability to make critical in-flight decisions is what separates low-time from high-time pilots, and that makes pilot selection a critical element. As Bradley pointed out, it's easy to get fixated on the mission and forget about the flying: he wants to ensure his pilots fly safe and know when to call it quits.

The TFO side is equally challenging. Eighteen-year police veteran Thompson is the unit's newest sergeant and TFO, and helps fill the gap for law enforcement calls. To meet the TFO requirements, he became an emergency medical technician and then fully qualified to swing from the long line. He said learning the aircraft, along with all the rescue and EMS components, was like drinking from a fire hose. From the law enforcement perspective, "You get up there, it's a lot different, you see three-dimensional — I see the tool we can be to the ground units if properly done."

In adding that third dimension, he was surprised at how challenging establishing a perimeter from the air actually was, especially with Sonoma County's rolling hills and crooked roads. Said Thompson, "Trying to find the words to explain what the ground units are about to encounter is really difficult."

As difficult as it is, it is also a coveted spot. At press time, one TFO spot was open and 11 officers had applied



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Topping off the team is the man behind the scenes, Kevin Mawhinney, a former U.S. Coast Guard mechanic and crew chief, who ensures Henry-1 is up for its daily lifesaving role. Mawhinney said the Coast Guard prepared him well for this role, as he takes care of every possible issue that pops up, from avionics to airframe issues, and keeps Henry-1 ready to go at all times. Mawhinney meticulously manages the ever-unpredictable airworthiness directives, service bulletins and miscellaneous equipment flair-ups that are always present. On his days off or after hours, he'll even come in and check on maintenance issues noticed by crewmembers.


Said Thompson about Mawhinney: "Often times, amazingly, he's had the right part 'squirreled away' on the shelf. This foresight has more than once kept us in-service, where otherwise it would have us down for a day or a weekend. When you have one rescue/law/fire machine that people are counting on, a mechanic that 'gets' our mission is priceless."

SCSO's team approach to accomplishing the mission is an essential part of its winning combination. Every team member pulls his or her weight, and then some. Team members are highly motivated and dedicated to their job and their calling as aviation professionals.

LOOKING AHEAD

As with every operation, Sonoma is looking to its future.

Despite Bradley's claim at the universality of the Bell 407, he wants to improve his unit's capabilities and safety factor by moving toward a twin-engine helicopter — even going as far as to evaluate the Eurocopter EC 135, Bell 429 and MD 900. Said Bradley, "The Bell 429 won hands down." The 429 is similar to the 407, only slightly larger, but has much more cabin space for advanced-life-support missions and an improved seating area. If the funding becomes available, it will be the ship the unit chooses.

Whatever ship the crews end up in, the missions accomplished by SCSO's helicopter unit will continue to amaze and fully exceed the expectations of the region's taxpayers. And, during these days of economic crisis, SCSO will also continue doing more with less — and the members of the helicopter unit will continue being very proud of the added safety they provide the whole community. Said Bradley, "This isn't a job, it's my hobby." 

The views expressed herein are those of the author and are not to be construed as official or reflecting the views of the Commandant or the U.S. Coast Guard.

Lt.-Cmdr Bergan is an instructor pilot with the U.S. Coast Guard at Air Station Humboldt Bay in northern California on the "Lost Coast," where he flies the MH-65 Dolphin. He graduated Navy Flight School in 2001 and since then has been involved in offshore operations and law enforcement with the U.S. Coast Guard.



The missions accomplished by Henry-1 continue to amaze and exceed the expectations of the region's taxpayers.
Michael Clark Photo